



PATENT ABSTRACTS OF JAPAN

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G02B 27/02**G02B 3/02****G02B 5/04****G02B 5/08****G02B 5/10****G02B 17/08****G02B 25/00****H04N 5/64**(21) Application number: **2000381359**(22) Date of filing: **22.12.93**(62) Division of application: **05323820**(71) Applicant: **OLYMPUS OPTICAL CO LTD**(72) Inventor: **HISAYOSHI KEIICHI**

(54) VIDEO DISPLAY DEVICE

plurality of diffracted optical devices.

(57) Abstract:

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PROBLEM TO BE SOLVED: To provide a compact and light weight wide angle of view head-mounted type video display device with the chromatic aberration compensated well.

SOLUTION: In the head-mounted type video display device equipped with a video display element 1 for displaying a video, a concave mirror 2 for performing magnification projection of the video at the pupil E of an eyeball and a half mirror 3 disposed between the pupil E of the eyeball and the concave mirror 2, or between the video display element 1 and the concave mirror 2, a diffracted optical device 20 of positive power is disposed in an optical path, and the following relation $0.033 < \Sigma (f/f_{DOE}) < 0.19$ is satisfied, where the f is the focal length of the optical whole system in diffraction order light, the fDOE is the focal length of the diffracted optical device, and the Σ means taking total of those, when there are a

